885-713 DEC 2 3 1980 Item 552-B GP 3.22/2:257/5
1/00
1539

UNITED STATES GOVERNMENT PRINTING OFFICE

SUPERINTENDENT OF DOCUMENTS

WASHINGTON, D.C. 20402

SUBJECT BIBLIOGRAPHY (SB)

SB-257
November 6, 1980

NOTICE

Prices shown were in effect on the above date. Government documents' prices are subject to change without prior notice. Therefore, prices in effect when your order is filled may differ from prices on this list. Since it is not feasible to change prices shown in Government documents in print, the price printed in a document may differ from the price in effect when your order is processed.

cat/REV 12/81 GB

NASA SCIENTIFIC and TECHNICAL PUBLICATIONS

7046415

Active Microwave Workshop Report, Report of a Working Group Meeting at Lyndon B. Johnson Space Center, July 22-26, 1974. *The official report of a 1974 workshop at Houston, Texas, attended by prominent scientists. The workshop showed the desirability and feasibility of using active microwave sensors on future Earth observation space missions.* 1975. 502 p. il. NAS 1.21:376 S/N 033-000-00624-1 $ 5.60

/277

Advanced Methods for the Solution of Differential Equations. *Based on a course given in differential equations at NASA's Lewis Research Center.* 1973, reprinted 1976. 354 p.il.
NAS 1.21:316 S/N 033-000-00478-8 4.15

Aeolian Features of Southern California: A Comparative Planetary Geology Guidebook. 1978. 264 p. il.
NAS 1.2:Ae 7 S/N 033-000-00706-0 5.25

Apollo Over the Moon: A View From Orbit. *This book describes techniques of lunar photography and interprets many photographs of the Moon.* 1978. 255 p. il. NAS 1.21:362 S/N 033-000-00708-6 14.00

Apollo-Soyuz Test Project Medical Report. 1977. 129 p. il.
NAS 1.21:411 S/N 033-000-00682-9 2.40

Application of Space Technology to Crustal Dynamics and Earthquake Research. 1979. 257 p. il.
NAS 1.60:1464 S/N 033-000-00775-2 6.00

Biomedical Results From Skylab. *Reports on research on the effects of space flight on basic biological systems, the physiological responses of man, and the health and safety of the crewmen in the Skylab program.* 1977. 491 p. il. Clothbound.
NAS 1.21:377 S/N 033-000-00648-9 10.50

Biomedical Results of Apollo. 1975. 592 p. il.
NAS 1.21:368 S/N 033-000-00628-4 13.15

Chemistry Between the Stars. *This booklet is intended for high school teachers of physics, chemistry, astronomy, or Earth science. It introduces a fascinating and potentially far-reaching new field of astronomy: The study of the chemical composition of interstellar space (the space between stars). Topics include molecular signals from space, molecules as interstellar probes, and utilizing spectroscopy.* 1976.
59 p. il. NAS 1.19:127 S/N 033-000-00655-1 $ 1.60

Clarity in Technical Reporting. 1964, reprinted 1977. 25 p.
NAS 1.21:7010 S/N 033-000-00513-0 1.30

Computer Program Abstracts. (Quarterly.) *An indexed abstract journal listing documented computer programs developed by or for the National Aeronautics and Space Administration, the Department of Defense, and the United States Nuclear Regulatory Commission.* Subscription price: Domestic - $6.50 a year; Foreign - $8.15 a year. Single copy price: Domestic - $1.65 a copy; Foreign - $2.10 a copy. [CPAQ] (File Code 2Q)
NAS 1.44:

COSMIC: A Catalog of Selected Computer Programs. *COSMIC, the Computer Software Management and Information Center, is a NASA-sponsored center that makes computer programs developed in the United States space program available to the public. This book describes approximately 300 of the most requested programs.* 1977. 152 p.
NAS 1.2:C 73/2 S/N 033-000-00700-1 3.25

Emission Line Survey of the Milky Way. 1979. 220 p. il. Clothbound.
NAS 1.21:434 S/N 033-000-00770-1 15.00

Evaluation of the NASA Tech House, Including Live-In Test Results, Volume 1. *NASA's Technology Utilization House was designed and constructed at NASA's Langley Research Center to show how applications of aerospace technology could help the home building industry. This publication presents a performance evaluation of the Tech House based on a one-year live-in experiment.*
1979. 67 p. il. NAS 1.64:1564 S/N 033-000-00783-3 3.50

Facilities Engineering Handbook. 1974. 342 p. il.
NAS 1.18:F 11/2/974 S/N 033-000-00562-8 4.60

Fluid Mechanics, Acoustics, and Design of Turbomachinery: Proceedings of a Symposium Held at University Park, Pennsylvania, August 31-September 3, 1970. 1974. 859 p. il. 2 volumes, sold as a set.
NAS 1.21:304 S/N 033-000-00524-5 9.00

Forecast of Space Technology, 1980-2000. 1976, reprinted 1978.
385 p. il. NAS 1.21:387 S/N 033-000-00641-1 4.00

Foundations of Space Biology and Medicine:

Volume 1, Space as a Habitat. 1975. 442 p. il. Clothbound.
NAS 1.21:374/v.1 S/N 033-000-00605-5 $11.75

Volume 2, Book 1, Ecological and Physiological Bases of Space Biology and Medicine. 1975. 406 p. il. Clothbound.
NAS 1.21:374/v.2/bk.1 S/N 033-000-00606-3 9.40

Volume 2, Book 2, Ecological and Physiological Bases of Space Biology and Medicine. 1975. 348 p. il. Clothbound.
NAS 1.21:374/v.2/bk.2 S/N 033-000-00607-1 8.80

Volume 3, Space Medicine and Biotechnology. 1975. 542 p. il. Clothbound. NAS 1.21:374/v.3 S/N 033-000-00608-0 11.00

Fuel Cells, A Survey. 1973, reprinted 1976. 106 p. il.
NAS 1.21:5115 S/N 033-000-00500-8 1.75

Gamma Ray Astrophysics: A Symposium Held at NASA Goddard Space Flight Center, April 30-May 2, 1973. 1973. 412 p. il.
NAS 1.21:339 S/N 033-000-00539-3 3.75

Gravitational Forces and Movements on Spacecraft. 1975. 142 p. il.
NAS 1.26:2618 S/N 033-000-00634-9 2.70

High Altitude Perspective. *Discusses the special cameras and aircraft, including the U-2 aircraft that NASA uses in aerial photography and remote sensing of the Earth.* 1978. 30 p. il.
NAS 1.21:427 S/N 033-000-00731-1 4.00

High Energy Astronomy Observatory.
S/N 033-000-00808-2 2.50

High Energy Phenomena on the Sun, A Symposium Held at Goddard Space Flight Center, Greenbelt, Maryland, September 28-30, 1972. 1973. 641 p. il. NAS 1.21:342 S/N 033-000-00545-8 5.75

Holography, A Survey. *Holography, the recording and viewing process which allows reconstruction of three-dimensional images of diffuse objects, is examined in depth.* 1973. 129 p. il.
NAS 1.21:5118 S/N 033-000-00546-6 2.00

Holography and Optical Filtering, A Conference Held at Marshall Space Flight Center, Huntsville, Alabama, May 24-25, 1971. 1973. 202 p. il.
NAS 1.21:299 S/N 033-000-00496-6 3.25

Inspection System Provisions for Aeronautical and Space System Materials, Parts, Components, and Services. 1971. 28 p.
NAS 1.22/3:5300.4 (1 C) S/N 033-000-00398-6 1.10

International Workshop on Earth Resources Survey Systems, Held at the University of Michigan, May 3-14, 1971, Volume 1. 1972. 366 p. il.
NAS 1.21:283/v.1 S/N 033-000-00441-9 $ 6.00

Laser Technology: A Survey. 1973, reprinted 1978. 56 p.
NAS 1.21:5116 S/N 033-000-00537-7 1.90

Lessons of the NASA Tech House. 1980. 38 p. il.
NAS 1.21:442 S/N 033-000-00792-2 3.00

Levels of Edit. *This report analyzes the process of editing manuscripts that are written about scientific or engineering subjects.* 1980. 26 p.
NAS 1.12/7:80-1 S/N 033-000-00785-0 2.00

Life Beyond Earth and the Mind of Man, A Symposium Held at Boston University, November 20, 1972. 1973, reprinted 1979. 106 p. il.
NAS 1.21:328 S/N 033-000-00518-1 2.50

Liquid Hydrogen as a Propulsion Fuel, 1945-1959. 1978. 325 p. il.
NAS 1.21:4404 S/N 033-000-00707-8 5.50

Materials Processing in Space: Early Experiments.
S/N 033-000-00809-1 10.00

Mathematical Modeling of Diverse Phenomena. 1979. 404 p.
NAS 1.21:437 S/N 033-000-00777-9 8.00

Mission to Earth: Landsat Views the World. *This impressive collection of Landsat photographs of Earth as seen from space makes real to us the leaps in technological advancement achieved by NASA in recent years. The Landsat satellites were launched and orbited specifically to obtain high-quality photos of Earth, and 400 of the very best of these photos were selected for this picture book. Nearly all of the photos are reproduced in full color, showing the vivid and varied hues of the Earth's landscape, as they can be seen only from space. One hundred fifty of these plates are devoted to the United States, showing parts of all 50 States, and many major cities. Selected scenes of the rest of the world, including all major cities, make up the remaining 250 plates. Each plate is accompanied by detailed captions, which point out and explain the major points of interest.* 1976. 459 p. il.
Clothbound. NAS 1.21:360 S/N 033-000-00659-4 14.00

NASA Activities. (Monthly.) *Contains general and scheduled activities of NASA.* Subscription price: Domestic - $14.50 a year; Foreign - $18.15 a year. Single copy price: Domestic - $1.50 a copy; Foreign - $1.90 a copy (6). [NACT] (File Code 2M)
NAS 1.46:

NASA Aeronautics. 1980. 27 p. il.
NAS 1.2:Ae 8/5 S/N 033-000-00796-4 2.00

NASA and Energy. *Briefly describes NASA's work in wind generation of electricity, photovoltaic solar cells, direct solar cells, direct solar heating and cooling, advanced ground propulsion, energy storage, stationary (on-site) power, and advanced coal extraction.* Rev. 1978. 20 p. il. NAS 1.2:En 2 S/N 033-000-00734-5 $ 1.10

NASA Procurement Regulation (NHB 5100.2B). *Subscription service includes supplemental material. Issued irregularly, for an indeterminate period. In looseleaf form, punched for 3-ring binder. This Regulation, issued by the Director of Procurement under authority delegated by the Administrator, establishes for the National Aeronautics and Space Administration (NASA) uniform policies and procedures relating to the procurement of property and services under the authority of the National Aeronautics and Space Act of 1958, as amended.* 1977. Subscription price: Domestic - $60.00; Foreign - $75.00. [NAPR] (File Code 1S)
NAS 1.6/2:977

NASA Standard Procedures for the Microbiological Examination of Space Hardware. 1980. 27 p. il.
NAS 1.22/3:5340.1 B S/N 033-000-00786-8 1.75

NASA Tech House. *Discusses and shows photographs of NASA's Technology Utilization House (Tech House), which was designed and constructed at NASA's Langley Research Center to show how applications of new technology and aerospace technology can help the homebuilding industry.* 1977. 19 p. il. NAS 1.19:149 S/N 033-000-00704-3 1.10

National Geodetic Satellite Program. 1977. 1030 p. il. 2 parts, sold as a set. NAS 1.21:365/pt.1-2 S/N 033-000-00625-0 12.25

Near Infrared Spectra of Jupiter, Saturn, and Uranus. 1974. 247 p. il.
NAS 1.21:3086 S/N 033-000-00576-8 2.65

New Horizons. *Discusses new developments in space exploration and research.* Rev. 1977. 40 p. il.
NAS 1.19:117/2 S/N 033-000-00697-7 1.60

Nondestructive Testing: A Survey. *This survey reviews both standard and newer methods of nondestructive evaluation (NDE) and gives advantages, disadvantages, and practical application of each method of evaluation.* 1973. 282 p. il.
NAS 1.21:5113 S/N 033-000-00471-1 3.45

Observing Earth From Skylab. 1975. 16 p. il.
NAS 1.20:NF-56 S/N 033-000-00627-6 1.00

Outlook for Space: Report to the NASA Administrator by the Outlook for Space Study Group. *This study was commissioned by NASA to examine future space activities within the context of possible national needs, and to identify directions the United States should take in the civilian use and exploration of space for the remainder of this century. The report describes the study group's tasks and documents its findings, recommendations, and expectations for the future.* 1976. 372 p. il.
NAS 1.21:386 S/N 033-000-00640-3 $ 3.60

Overall Loudness of Steady Sounds According to Theory and Experiment. 1979. 143 p. il. NAS 1.61:1001 S/N 033-000-00690-0 3.75

Photography Equipment and Techniques, A Survey of NASA Developments. 1972, reprinted 1977. 182 p. il.
NAS 1.21:5099 S/N 033-000-00453-2 2.60

Possible Relationships Between Solar Activity and Meteorological Phenomena: A Symposium Held at Goddard Space Flight Center, Greenbelt, Maryland, November 7 and 8, 1973. 1975. 263 p. il.
NAS 1.21:366 S/N 033-000-00599-7 4.00

Project Orion: A Design Study of a System for Detecting Extrasolar Planets. 1980. 204 p. il.
NAS 1.21:436 S/N 033-000-00790-6 5.50

Quiet, Powered-Lift Propulsion. 1979. 420 p. il.
NAS 1.55:2077 S/N 033-000-00759-1 5.25

Requirements for Soldered Electrical Connections. 1976. 82 p. il.
NAS 1.23/3:5300.4 (3 A-1)
S/N 033-000-00667-5 2.75

Safety, Reliability, Maintainability and Quality Provisions for the Space Shuttle Program. 1979. 57 p.
NAS 1.22/3:5300.4 (1 D-2)
S/N 033-000-00781-1 2.50

Satellite-Derived Global Oceanic Rainfall Atlas (1973 and 1974). 1976. 180 p. il. NAS 1.21:410 S/N 033-000-00660-8 9.00

Scientific and Technical Aerospace Reports (STAR):

Scientific and Technical Aerospace Reports. (Semimonthly.) *This subscription announces abstracts, and indexes reports issued by NASA as well as by other Government agencies, universities, industry, and research organizations both in the United States and abroad.* Subcription price: Domestic - $60.00 a year; Foreign - $75.00 a year. Single copy price: Domestic - $2.50 a copy; Foreign - $3.15 a copy. [STAR] (File Code 2E)
NAS 1.9/4:

Scientific and Technical Aerospace Reports (STAR). - con.

Scientific and Technical Aerospace Reports - Cumulative Indexes. (Semiannually.) Subscription price: Domestic - $25.00 a year; Foreign - $31.25 a year. Semiannual Index: Domestic - $9.50, January-June; Foreign - $11.90, January-June. Cumulative Index: Domestic - $16.00, January-December which consists of 2 parts; Foreign - $20.00, January-December which consists of 2 parts. [STARI] (File Code 2S)
NAS 1.9/5:

Search for Extraterrestrial Intelligence, SETI. *Presents findings from a series of workshops conducted by NASA's Ames Research Center. Topics were interstellar communication, extra-solar planetary detection, and evolution of intelligent species and technological civilization (cultural evolution).* 1977. 276 p. il.
NAS 1.21:419 S/N 033-000-00696-9 $ 4.50

Skylab Earth Resources Data Catalog. *Using graphs, charts, and color pictures taken from the Skylab spaceship, this book presents the results of the EREP (Earth Resources Experiment Package), data vital to efficient management of land, water, and marine resources. Chapters describe the equipment used, and the development of techniques involved in remote sensing and their direct applications in areas of water, air, and land quality. Detailed charts and a photographic index further highlight the book.* 1974. 359 p. il.
NAS 1.2:Sk 9/14 S/N 033-000-00586-5 8.75

Skylab EREP Investigations Summary. 1978. 386 p. il. Clothbound.
NAS 1.21:399 S/N 033-000-00741-8 13.50

Skylab Explores the Earth. *This large volume reproduces in full-color hundreds of the most striking Skylab photographs, constituting a virtual "Earth photo album." Among the views of Earth portrayed in map-like detail are those of the Grand Canyon, the Sahara Desert, the Hawaiian Islands, and California's fault lines. Captions interpret each photograph, and help the reader understand the importance of each photo to studies in Earth sciences.* 1977. 517 p. il. Clothbound.
NAS 1.21:380 S/N 033-000-00674-8 15.00

Solar Power Satellite Concept: The Past Decade and the Next Decade. 1979. 20 p. il. NAS 1.2:So 4 S/N 033-000-00766-3 1.25

Solar Wind, Proceedings of a Conference Sponsored by the National Aeronautics and Space Administration, Conference Held March 21-26, 1971, Pacific Grove, California. *Presents the proceedings of a conference sponsored by the Ames Research Center and held at the Asilomar Conference Grounds. Included are discussions on the Sun, the connection between the magnetic structure of the solar atmosphere and interplanetary space, the solar wind plasma, and the solar and stellar angular momentum and its relation to solar wind.* 1972. 717 p. il.
NAS 1.21:308 S/N 033-000-00464-8 6.40

Soldering Electrical Connections: A Handbook. 1967, reprinted 1979.
66 p. il. NAS 1.21:5002/2 S/N 033-000-00246-7 $ 2.10

Solid Lubricants: A Survey. *Includes the most recent developments and trends in the field of solid lubrication. Discussions include a history of solid lubrication, bond lubricants, new developments, environmental effects, and much more.* 1972. 132 p. il.
NAS 1.21:5059 (01) S/N 033-000-00407-9 2.40

Soviet-American Conference on Cosmochemistry of the Moon and Planets, Held in Moscow, USSR, June 4-8, 1974. 1977. 929 p. il. Clothbound.
NAS 1.21:370/pts.1-2 S/N 033-000-00633-1 18.00

Space Flight Research Relevant to Health, Physical Education and Recreation With Reference to Skylab's Life Science Experiments. 1979.
60 p. NAS 1.9:148 S/N 033-000-00778-7 2.50

Space for Mankind's Benefit, Proceedings of a Space Congress Held in Huntsville, Alabama, November 15-19, 1971. 1972. 479 p. il.
NAS 1.21:313 S/N 033-000-00467-2 5.25

Space Resources and Space Settlements. *Contains the technical papers from the 1977 Summer Study on Space Settlements and Industrialization Using Nonterrestrial Materials, held at NASA Ames Research Center.* 1979.
288 p. il. NAS 1.21:428 S/N 033-000-00765-5 6.50

Space Settlements: A Design Study. 1977. 185 p. il.
NAS 1.21:413 S/N 033-000-00669-1 5.00

Space Telescope. *This volume contains the authors' summaries of their papers on the Space Telescope, presented at the 21st annual meeting of the American Astronautical Society at Denver, Colorado, August 26-28, 1975.* 1976. 231 p. il.
NAS 1.21:392 S/N 033-000-00644-6 2.30

Spinoff: An Annual Report. *The annual report of NASA's Technology Utilization Program, reporting on direct and indirect benefits resulting from the use of NASA technology.*

1979. 1979. 116 p. il.
NAS 1.1/4:979 S/N 033-000-00757-4 4.25

1980. 1980. 147 p. il.
NAS 1.1/4:980 S/N 033-000-00789-2 5.50

Standardized Development of Computer Software:

Part 1, Methods. 1976. 379 p. il.
NAS 1.12/6:43-29/pt.1 S/N 033-000-00755-8 4.50

Part 2, Standards. 1976. 548 p. il.
NAS 1.12/6:43-29/pt.2 S/N 033-000-00756-6 5.75

Study of Comets: The Proceedings of International Astronomical Union Colloquium 25, Held at Goddard Space Flight Center, Greenbelt, Maryland, October 28-November 1, 1974, Parts 1-2. 1976. 1083 p. il. Clothbound.
NAS 1.21:393/pt.1-2 S/N 033-000-00637-3 $11.25

Sun, Weather, and Climate. *This book presents an overall view of the present status of the new field of Sun-weather/climate investigations.* 1978. 360 p. il. NAS 1.21:426 S/N 033-000-00747-7 6.25

Telescopes and Space Exploration. *Astronomers are frequently asked to explain how telescopes are used to study the universe and, in particular, why many different kinds of telescopes are necessary for astronomical research. This colorful booklet which shows the progress in contemporary astronomy and astrophysics depends on complementary investigations with sensitive telescopes, some of which can be on the Earth's surface and others which must be in space.* 1976. 16 p. il.
NAS 1.2:T 23/2 S/N 033-000-00647-1 1.00

Test Methods and Procedures for Microcircuit Line Certification. 1971. 384 p. il. NAS 1.22/3:5300.4 (3 D) S/N 033-000-00379-0 4.45

This Island Earth. *This book shows the Earth in 144 color photographs and 33 black and white photos, as it appears from space. The color photos were taken by the Apollo astronauts, and the black and white photos were taken by observer satellites. The photos show the atmosphere, land, water, topographical features and the effects of man on his Earth.* 1970. 182 p. il. Clothbound.
NAS 1.21:250 S/N 033-000-00321-8 9.50

bine Design and Application: *Volume 1 is out of print.*

Volume 2. 1973. 148 p. il.
NAS 1.21:290/v.2 S/N 033-000-00535-1 1.80

Volume 3. 1975. 145 p. il.
NAS 1.21:290/v.3 S/N 033-000-00568-7 2.10

Why Man Explores: A Symposium Held at Beckman Auditorium, California Institute of Technology, Pasadena, California, July 2, 1976. *Prepared from a transcript of a panel discussion in conjunction with the Viking mission to Mars. The panelists were Philip Morrison, James Michener, Jacques Cousteau, and Ray Bradbury.* 1977. 94 p. il.
NAS 1.19:123 S/N 033-000-00672-1 1.10

Wind Energy Developments in the 20th Century. *An illustrated summary of the recent history of wind-powered electricity generation.* 1975. 20 p. il. NAS 1.2:W 72 S/N 033-000-00715-9 1.10

World of Tomorrow. 1978. 61 p. il.
NAS 1.19:144 S/N 033-000-00745-1 3.00